



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,463	03/04/2002	Reiner Viebahn	LIP 005	3303

7590 01/09/2004

HAYES, SOLOWAY, HENNESSEY & HAGE, P.C.
175 CANAL STREET
MANCHESTER, NH 03101

EXAMINER

RIVELL, JOHN A

ART UNIT	PAPER NUMBER
----------	--------------

3753

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,463

Applicant(s)

VIEBAHN ET AL.

Examiner

John Rivell

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/4/02 (App. priority), 9/6/02 (IDS).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 22 is/are rejected.
- 7) ☒ Claim(s) 11-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claims 1-22 are pending.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are under 35 U.S.C. §102 (b) as being anticipated by Bibby (WIPO WO 00/32431 cited by applicant).

The document to Bibby discloses, in figures 1 and 2, "a fuel tank (11) for a motor vehicle, comprising means (inherent in the system) for delivering fuel from the fuel tank (11) to an engine, means for the introduction of air (at neck 13) into and the venting (16, 17, 18) of air from the tank, a filler pipe (13, 14, 15) having a closable intake end (12) and an outlet end (15) with a mouth (21) opening into the interior of the tank, at least one first valve (23) disposed in the region of the outlet end (15) of the filler pipe and adapted to sealingly close at least in relation to a fuel blowback, and at least one second valve (29) which is disposed in the filler pipe at least in the region of the outlet end (15) thereof and adapted for bridging over the first valve" as recited in claim 1.

Regarding claim 2, in Bibby, "the second valve (29) is a valve which is operable to open and close in the same direction with the first valve (23) and which is adapted upon actuation to respond to a lower actuating force than the first valve" as recited, in that the preload of spring 32 on valve 29 is "considerable lower" than that of the spring 26 of valve 23.

Regarding claim 3, in Bibby, "the first valve (23) has a valve body and wherein the second valve (29) is disposed in the valve body of the first valve" as recited.

Regarding claim 4, in Bibby, "the first valve (23) is in the form of a spring-loaded (26) non-return valve" as recited.

Regarding claim 22, in Bibby, "the outlet end of the filler pipe opens into the fuel tank above the planned maximum level of fuel therein" as recited, by reason of the location of the valve as shown in figure 1 and 2.

Claim 1 is further, and claims 7-10 and 22 are under 35 U.S.C. §102 (b) as being anticipated by Devall et al.

The patent to Devall et al. discloses "a fuel tank (18) for a motor vehicle, comprising means (inherent) for delivering fuel from the fuel tank to an engine, means for the introduction of air into (neck 12, 14) and the venting (20) of air from the tank, a filler pipe (14) having a closable intake end (48) and an outlet end (16) with a mouth (at 166) opening into the interior of the tank, at least one first valve (valve head seal 236 and seat 114) disposed in the region of the outlet end of the filler pipe and adapted to sealingly close at least in relation to a fuel blowback, and at least one second valve (valve head 258 biased by spring 260 against seat 238; figure 10) which is disposed in the filler pipe at least in the region of the outlet end thereof and adapted for bridging over the first valve" as recited.

Regarding claim 7, in Devall et al. "the second valve (at head 258) is in the form of a safety valve which is openable and closable in the opposite direction to the first valve" as recited.

Regarding claim 8, in Devall et al., "the second valve (at head 258) is in the form of a spring-loaded valve" at spring 260 as recited.

Regarding claim 9, in Devall et al., "first valve has a valve body (read at seal 236), and the second valve has a valve body (read at seat 238) as a sealing seat for the valve body of the first valve" as recited.

Regarding claim 10, in Devall et al., "first and second valves include a common valve housing (90) and the first and second valves include a respective valve body, the first and second valve bodies being disposed in the common valve housing" as recited.

Regarding claim 22, in Devall et al., "the outlet end (at 16) of the filler pipe opens into the fuel tank above the planned maximum level of fuel therein" as recited, by reason of the location as shown in figure 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bibby or Devall et al.

The document to Bibby or the patent to Devall et al. discloses all the claimed features, as described above, with the exception of having "second valve designed to be openable at a differential pressure with a fall to the interior of the tank of between about 5 and 20 mbars".

However, to operate either of the "second" valve of Bibby or Devall et al. at a value of "between about 5 and 20 mbars" of pressure is considered to be an obvious design expedient over these features as disclosed in Bibby or Devall et al. which provide no new and/or unexpected results nor solves any stated problem. That is, the claimed feature relates to a desired operating condition, which operating condition is a design expedient solving no state3d problem nor providing any new and/or unexpected results.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bibby in view of Horner, Jr.

The document to Bibby discloses all the claimed features, as noted above, with the exception of having "the second valve (being) a resilient plate member which in the non-actuated condition of the second valve closes the passage through the valve body of the first valve".

The features called for by the claim relate to a specific type of valve element, attached to the "first valve", which is not exclusive to fuel tank environs, but can be found on any valve device including plural parallel plumbed check valve elements.

The patent to Horner, Jr. discloses that it is known in the art to employ, as a "second valve" in a parallel plumbing arrangement, a "resilient plate" type check valve 32, attached to a "first valve" element 36, each of which provide a check valve function of a fluid flowing in the same direction, for the purpose of permitting low pressure

Art Unit: 3753

differential flows and high pressure differential flows, as in Bibby, by employing diverse types of check valves plumbed in parallel.


It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Bibby a flexible "resilient plate" type of check valve in place of the reciprocating check valve 29 of Bibby for the purpose of permitting low pressure differential flows and high pressure differential flows, as in Bibby, as recognized by Horner, Jr.

Claims 11-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (703) 308-2599. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (703) 308-1272. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.


John Rivell
Primary Examiner
Art Unit 3753

j.r.